

# Exhibit 17

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS

CYTOLOGIX CORPORATION,	)	
	)	
Plaintiff,	)	
vs.	)	CIVIL ACTION NO.
	)	04-11783 (RWZ)
VENTANA MEDICAL SYSTEMS, INC.	)	
	)	
Defendant.	)	
	)	

VIDEOTAPED DEPOSITION OF  
GEOFFREY D. NUNBERG, Ph.D.

---

April 20, 2006

REPORTED BY: CAROLYN M. MANN, CSR 10066

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--oOo--

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2                   FOR THE DISTRICT OF MASSACHUSETTS  
3   CYTOLOGIX CORPORATION,                   )  
  )  
4                   Plaintiff,                   )  
                  vs.                            ) CIVIL ACTION NO.  
5    ) 04-11783 (RWZ)  
  VENTANA MEDICAL SYSTEMS, INC.            )  
6    )  
                  Defendant.                   )  
7    )

8                   BE IT REMEMBERED that pursuant to Notice,  
9   and on Thursday, April 20, 2006, commencing at 12:05  
10   p.m. thereof, at Four Embarcadero Center, 10th  
11   Floor, San Francisco, California, before me, CAROLYN  
12   M. MANN, a Certified Shorthand Reporter, personally  
13   appeared

14                   GEOFFREY D. NUNBERG, Ph.D.,  
15   called as a witness by the Plaintiff, who, having  
16   been first duly sworn, was examined and testified as  
17   follows:

18   --oOo--

19                   KIRKPATRICK & LOCKHART NICHOLSON GRAHAM,  
20   State Street Financial Center, One Lincoln Street,  
21   Boston, Massachusetts 02111-2950, represented by  
22   MICHAEL E. ZELIGER and LARISSA S. BIFANO, Attorneys  
23   at Law, appeared as counsel on behalf of the  
24   Plaintiff (by video conference).

25                   WILSON SONSINI GOODRICH & ROSATI, One

1 Market Street, Spear Tower, Suite 3300, San  
2 Francisco, California 94105-1126, represented by  
3 ROGER J. CHIN, M.D., Attorney at Law, appeared as  
4 counsel on behalf of the Defendant.

5 ALSO PRESENT: Stephanie Bonfield; John  
6 Trengali (by video conference); Jake Krohn,  
7 videographer.

8 --oOo--

9 P R O C E E D I N G S

10 (Exhibits 1 through 5 were marked prior to  
11 the start of the deposition.)

12 THE VIDEOGRAPHER: Okay. Here begins  
13 videotape number one in the deposition of Professor  
14 Geoffrey Nunberg in the matter of CytoLogix  
15 Corporation vs. Ventana Medical Systems,  
16 Incorporated in the United States District Court for  
17 the District of Massachusetts, case number 04-11783  
18 (RWZ). Today's date is April 20th, 2006. The time  
19 on the video monitor is 12:06 p.m. The video  
20 operator today is Jake Krohn, a notary public  
21 contracted by LegaLink Boston, Boston,  
22 Massachusetts. This video deposition is taking  
23 place at Four Embarcadero, San Francisco,  
24 California, and was noticed by Michael Zeliger of  
25 Kirkpatrick & Lockhart.

1 Counsel, please voice identify yourselves  
2 and state whom you represent.

3 MR. ZELIGER: This is Michael Zeligier of  
4 Kirkpatrick & Lockhart Nicholson Graham on behalf of  
5 the plaintiff, CytoLogix. With me here in Boston  
6 participating by video conference is Larissa Bifano.  
7 And in San Francisco, also with Kirkpatrick &  
8 Lockhart, is our paralegal, Stephanie Bonfield. For  
9 the moment we also have John Trengali, who is a  
10 member of our IT department, who is also here in  
11 Boston.

12 MR. CHIN: Roger Chin of Wilson, Sonsini,  
13 Goodrich and Rosati on behalf of defendant, Ventana  
14 Medical Systems.

15 THE VIDEOGRAPHER: Okay. I guess, would  
16 all others present please state your name for the  
17 record.

18 THE WITNESS: Geoffrey Nunberg.

19 THE VIDEOGRAPHER: Sorry. Stephanie?

20 MS. BONFIELD: Stephanie Bonfield.

21 THE VIDEOGRAPHER: All right. Would the  
22 reporter please swear in the witness.

23 (Whereupon, the Witness was sworn)

24 THE VIDEOGRAPHER: Please begin.

25 EXAMINATION BY MR. ZELIGER

1 or responses to office actions.

2 A. I worked with the attorney who prepared  
3 the patents, and then subsequently worked with that  
4 attorney when there was some question about -- there  
5 were some issues of prior art that came up that we  
6 responded to, and there was some question as to  
7 bringing an infringement suit against somebody else  
8 that we worked on for a while, and nothing ever  
9 happened in that, in that.

10 Q. Are you familiar with the phrase "one of  
11 ordinary skill in the art"?

12 A. I know the phrase, yes.

13 Q. What does -- what's your understanding of  
14 that phrase?

15 A. I take it that it means what it says: One  
16 of ordinary skill in the art, a person who is of  
17 ordinary skill in the art.

18 Q. Who is one of ordinary skill in the art of  
19 the '261 patent?

20 A. I think it depends what part of the  
21 language of the patent you're -- if we're talking  
22 about ordinary skill in the art with regard to the  
23 language of the patent, the language of the patent  
24 rather than some other aspects of the patent, I take  
25 it it depends on whether that language is particular

1 to the domain of mechanical engineering that would  
2 be relevant to this particular invention, or merely  
3 one who was a native speaker of, of, a competent  
4 native speaker of the language that was spoken in  
5 the community in which that patent was filed.

6 Q. Prior to my asking you just now, have you  
7 considered who one of ordinary skill is in the art  
8 of the '261 patent?

9 A. Can you clarify what you mean by have I  
10 considered what -- I'm not sure I understand the  
11 question.

12 Q. Well, I asked you who one of ordinary  
13 skill in the art of the '261 patent is, and you gave  
14 me an answer that was somewhat equivocal. So my  
15 follow-up question is, have you thought about that  
16 prior to me asking you today?

17 A. Yes.

18 Q. Do you consider yourself to be one of  
19 ordinary skill in the art of the '261 patent?

20 A. If by "the art of the '261 patent" you  
21 mean the aspects of, let's say, mechanical  
22 engineering that are relevant to the development of  
23 this particular product, no.

24 Q. Well, what do you consider to be the art  
25 of the '261 patent?



1           A.    I'm not a mechanical engineer, so I simply  
2    would assume it has -- I'm not even aware of how the  
3    divisions of mechanical engineering are set up,  
4    whether medical device manufacturers --

5           Q.    In forming your opinion . . .

6           A.    You go ahead.

7           Q.    In forming your opinions that appear in  
8    the declaration that you recently submitted, did you  
9    consider the level of ordinary skill in the art of  
10   the '261 patent?

11          A.    Again, I have to know what you mean, did I  
12   consider. I don't understand the question.

13          Q.    Did you consider how one of ordinary skill  
14   in the art of the '261 patent, how that person would  
15   understand the terms in the claims?

16          A.    Yes.

17          Q.    How did you do that -- well, first of all,  
18   if you've done that, then you must have some  
19   understanding of who one of ordinary skill in the  
20   art is, correct?

21               MR. CHIN: Object to the form.

22               MR. ZELIGER: Q. You may answer.

23          A.    Yes.

24          Q.    And I'd like to know what your  
25   understanding is of what, of who the person is who

1 has ordinary skill in the art in the '261 patent.

2 A. I take it that this would be a person who  
3 was a competent speaker of English, which is all of  
4 the skill or knowledge that would be relevant to  
5 determining the meanings of the basic English terms  
6 and grammatical apparatus and pronouns and so forth  
7 that were used in the, in the patent, as well as one  
8 with sufficient specialized knowledge of the field  
9 to understand such technical terms and terms of art  
10 as are included in the patent.

11 Q. Do you have the knowledge of the second  
12 half of your answer; that is, the technical skills  
13 necessary to understand terms of art that are used  
14 in the '261 patent?

15 A. No, I don't.

16 Q. Do you understand, sir, that under U.S.  
17 patent law, claims are to be interpreted according  
18 to the understanding of one of skill in the relevant  
19 art?

20 A. Yes, I do.

21 Q. If you lack those skills, how is it that  
22 you are able to offer an opinion about the meaning  
23 of the claim terms?

24 A. As I said, one of ordinary skill in the  
25 art includes, on the one hand, the specialized

1 knowledge necessary to understand terms of art and  
2 technical terms as used in the patent; on the other  
3 hand, knowledge of the rules of English and the  
4 English constructions that are common to all arts  
5 and, in fact, all literate English communities. So  
6 that to be one of ordinary skill in -- what one's  
7 knowledge of, say, mechanical engineering is perhaps  
8 relevant to the way in which one uses one or another  
9 technical term of mechanical engineering. It is not  
10 relevant to the way one understands the pronoun  
11 "it."

12 Q. Given your background, which we  
13 acknowledge is quite extensive and impressive, given  
14 your background in linguistics, do you consider  
15 yourself qualified to offer opinions on any patent  
16 claims that are written in English, regardless of  
17 the subject matter?

18 MR. CHIN: Object to the form of the  
19 question.

20 THE WITNESS: That depends on what  
21 particular aspect of the claim you're talking about.  
22 As I say, if the claim involves -- if the question  
23 about the claim involves the ordinary grammatical  
24 apparatus of English and is in no wise specialized  
25 with regard to a particular subfield of, of, of art,

1 then yes.

2 MR. ZELIGER: Q. Without a background in  
3 a particular specialized subfield, how do you know  
4 whether you're confronting a term of art?

5 A. There are some terms of art that are  
6 manifestly terms of art and one either recognizes  
7 instantly as terms of art, or as at least terms that  
8 do not have their ordinary English uses. There are  
9 some terms of art that might be misleading to one  
10 who was not adept in a particular field. There are  
11 other elements of language -- tenses, pronouns,  
12 ordinary common verbs like "is" and "are" and, and  
13 "be" and "move" and "touch" and so on -- whose use  
14 is general for all forms and all registers of  
15 English and which, because they denote very general  
16 logical relations, can't, and are never -- can't be  
17 and are never terms of art.

18 Q. Do you have any experience with automated  
19 slide staining equipment, either professional  
20 experience or educational experience?

21 A. No.

22 Q. Do you have any such experience with  
23 designing mechanical equipment?

24 A. No.

25 Q. Do you have any such experience with the

1 operation of laboratory instruments?

2 A. No.

3 Q. Do you have any such experience with  
4 pathology?

5 A. No.

6 Q. Do you have any such experience with  
7 cytology?

8 A. No.

9 Q. Do you have any experience working in a  
10 laboratory?

11 A. No.

12 Q. Do you have any experience working with  
13 reagents?

14 A. No.

15 Q. Do you have any experience with  
16 slide-based cellular diagnostics?

17 A. No.

18 Q. In the process of forming your opinions  
19 that appear in your declaration, did you consult  
20 with anyone who has these experiences?

21 A. No.

22 Q. So in forming your opinion, you have not  
23 consulted with anyone who is skilled in the  
24 mechanical arts associated with the '261 patent?

25 A. That's right.

1 Q. And you lack those skills and experiences  
2 yourself.

3 A. That's right.

4 Q. Are you familiar with the term "platform"?

5 A. In a general way, yes.

6 Q. What does "platform" mean to you?

7 MR. CHIN: Object to the form.

8 THE WITNESS: I wouldn't want to hazard a  
9 definition offhand, but in the general sense of the  
10 term, I'm familiar with it.

11 MR. ZELIGER: Q. Well, as I understand  
12 your declaration, you've offered opinions about the  
13 standard English understanding of certain terms.

14 A. That's right.

15 Q. Do you have an understanding of the  
16 standard English understanding of the term  
17 "platform"?

18 A. I have an understanding of the standard  
19 English understanding of the word "platform." I  
20 don't know that that understanding is relevant to  
21 the use of "platform" in the patent.

22 Q. Were your opinions where you've discussed  
23 the standard written, or the standard English  
24 understanding of certain terms done in the context  
25 of the patent?

1           A.    Can you either repeat or elaborate that?

2           Q.    Well, let's do it a different way.

3                   What is your understanding of the term  
4    "platform"?

5           MR. CHIN:   Object to the form.

6           THE WITNESS:   Again, I'd want to -- I  
7    don't want to offer a definition offhand, but I  
8    understand the general meaning of the English word  
9    "platform" as, which, which, which may in turn have  
10   more specific or specialized uses relevant to  
11   various arts or, or, or fields of science or fields  
12   of trade with which I'm not specifically familiar.

13           MR. ZELIGER:   Q.   Are you able to answer  
14   my question, which is, what is your understanding of  
15   the term "platform"?

16           MR. CHIN:   Objection.   That's been asked  
17   and answered.

18           THE WITNESS:   In this document or in  
19   general?

20           MR. ZELIGER:   Q.   According to standard  
21   English.

22           A.    Off the top of my head and without  
23   consulting dictionaries, which is a procedure I  
24   don't like to do, I would say it denotes a raised  
25   surface on which objects are supported or arrayed.

1 Q. According to that definition, does a  
2 platform have to be round?

3 MR. CHIN: Object to the form.

4 THE WITNESS: No.

5 MR. ZELIGER: Q. According to that  
6 definition, does a platform have to be a rotary  
7 carousel?

8 A. No.

9 Q. I'd like to direct your attention to the  
10 phrase that appears in your declaration. Actually,  
11 let's, let's mark it as an exhibit so that we're not  
12 speaking purely in theoretical terms.

13 Stephanie, would you please hand to the  
14 court reporter the original Exhibit No. 5. If it's  
15 already been premarked, then you may simply hand it  
16 to the witness. If the court reporter has not yet  
17 initialled it, please hand it to the court reporter.

18 THE REPORTER: This is Carolyn, the court  
19 reporter. We did pre-mark all the exhibits prior to  
20 the deposition.

21 MR. ZELIGER: Very well. Thank you.

22 So please just hand Professor Nunberg the  
23 original Exhibit 5 and a copy to Mr. Chin.

24 MR. CHIN: Did you want the declaration?  
25 I think that's number 1.



1 relevant art.

2 MR. ZELIGER: What I'd like to do now is  
3 take a short break. And Stephanie, I will e-mail to  
4 you three exhibits. They're each one page, they're  
5 very short, and if you have a chance to just print  
6 out --

7 MS. BONFIELD: All right.

8 MR. ZELIGER: -- two copies, an original  
9 and a copy, we can reconvene in about 10 minutes.

10 And I can assure you both we won't go very  
11 long today. I'd be surprised if I have more than an  
12 additional hour worth of questioning.

13 THE WITNESS: Great.

14 MR. ZELIGER: Thank you.

15 THE VIDEOGRAPHER: Off the record at  
16 12:43.

17 (Whereupon, a recess was taken and  
18 Deposition Exhibits 8, 9, and 10 were  
19 marked for identification.)

20 THE VIDEOGRAPHER: We are back on the  
21 record at 12:58, and this is the beginning of tape  
22 number two.

23 MR. ZELIGER: Please hand to Professor  
24 Nunberg Exhibit 8, and a copy to Mr. Chin.

25 Q. Professor Nunberg, you have in front of

1 you marked as Exhibit 8 a page with some text on it.

2 Would you please read the text aloud for the record.

3 A. "Moving the probe and the probe dispense  
4 station relative to one another."

5 Q. Under standard English interpretation,  
6 what does this phrase mean?

7 MR. CHIN: Object to form.

8 THE WITNESS: I'm going to assume here  
9 that this is used in a larger syntactic frame  
10 analogous to that of the phrase in question in the  
11 claim in the patent? That is to say --

12 MR. ZELIGER: Q. You assume correctly.

13 A. -- that it follows "a method of"?

14 Q. Indeed.

15 A. Okay. Then the phrase denotes an act of  
16 moving two things, a probe and a probe dispense  
17 station, such that their relative positions are at  
18 some point changed.

19 Q. Much like the language that's at issue in  
20 your declaration, correct?

21 A. Yes.

22 Q. So in your view, the language on Exhibit 8  
23 would require both the probe and the probe dispense  
24 station to be in motion; is that correct?

25 MR. CHIN: Object to form.

1 THE WITNESS: Yes, at a minimum.

2 MR. ZELIGER: Please hand Professor  
3 Nunberg Exhibit No. 9 and hand a copy to Mr. Chin.

4 Q. Professor Nunberg, you now have before you  
5 what's been marked as Exhibit No. 9, another  
6 document that has a phrase written on it. Would you  
7 please read the phrase aloud for purposes of the  
8 record.

9 A. "Said nozzle support and said slide  
10 support moving relative to one another," of "one  
11 another other."

12 MR. CHIN: Is there a typo here, Mike?

13 MR. ZELIGER: There is.

14 Q. Please strike the last "other." Actually,  
15 take a pen and strike the last "other." Thank you.

16 A. Okay.

17 Q. According to standard written English,  
18 when interpreting this phrase is it your opinion  
19 that both the slide support and the nozzle support  
20 move?

21 A. Yes. Assuming, again, the larger context,  
22 that this is a, a gerund -- I don't know what the  
23 syntactic context is in which -- this is a phrase,  
24 this is a, so to speak, a sentence fragment, but  
25 yes, one would assume that in whatever way it's

1 construed, there has to be motion of both the nozzle  
2 support and slide support.

3 Q. Go back to Exhibit 8, please.

4 A. Eight being the probe and probe dispense  
5 station?

6 Q. Yes, that's correct. Did Ventana or its  
7 counsel inform you that they have issued patent  
8 claims that contain this text?

9 A. No.

10 Q. Did Ventana or its counsel inform you that  
11 the patent that has this claim text in it discloses  
12 as its only embodiment an instrument where the probe  
13 dispense station is stationary?

14 MR. CHIN: Object to the form.

15 THE WITNESS: No.

16 MR. ZELIGER: Q. Please turn to  
17 Exhibit 9. Did Ventana --

18 A. Nozzle support.

19 Q. -- or its counsel disclose to you as  
20 pending patent applications that contain claims with  
21 this language?

22 (Reporter interruption)

23 MR. ZELIGER: Q. Did Ventana or its  
24 counsel inform you that Ventana has a pending patent  
25 application with a claim that contains this

1 language?

2 A. No.

3 Q. Did Ventana or its patent counsel inform  
4 you that that application has as its only embodiment  
5 an instrument with a stationary slide support?

6 A. No.

7 MR. ZELIGER: Please hand to Professor  
8 Nunberg Exhibit No. 7, with a copy to Mr. Chin.  
9 Excuse me, I'm sorry, not 7, but rather 2,  
10 Exhibit No. 2.

11 Q. You've been handed what's marked as  
12 Nunberg Exhibit No. 2. I'll ask you to identify  
13 this document for the record, please.

14 A. This is U.S. Patent Richards, et al.

15 Q. What is the patent number, sir?

16 A. 6,537,818.

17 Q. And on the left-hand column, you'll see  
18 next to the number 73 it says "Assignee." Who is  
19 identified as the assignee?

20 A. Ventana Medical Systems.

21 Q. Please turn to claim 30, which appears in  
22 column 16 of Exhibit No. 2.

23 A. I'm sorry. Claim 30 . . .

24 Q. Is in column 16.

25 A. Which is on -- oh, I see. The columns are

1     numbered.   Yeah.

2             Q.    Take a moment to read claim 30.

3             A.    Okay.

4             Q.    Are you familiar with the term  
5     "embodiment"?

6             A.    Yes.

7             Q.    As that's used in patent law?

8             A.    Yes.

9             Q.    Do you understand, sir --

10            A.    I'm not --

11            Q.    -- that claims are not to be construed to  
12     exclude an embodiment disclosed in the patent?

13            A.    Can you repeat the, the question?

14            Q.    Do you understand, sir, that claims are to  
15     be construed so as not to exclude the disclosed  
16     embodiments?

17                   MR. CHIN:  Object to the form of the  
18     question.

19                   MR. ZELIGER:  Q.  Do you understand what  
20     I --

21            A.    Yes.

22            Q.    -- say, what I mean when I say that?

23            A.    Yes, yes.

24            Q.    I'm sorry.  I couldn't hear your response.

25            A.    Yes.

1 Q. The '818 patent, which has been marked as  
2 Exhibit 2, discloses as its only embodiments an  
3 instrument in which the probe dispense station is  
4 stationary. That's inconsistent with your  
5 interpretation of the language in claim 30, is it  
6 not?

7 MR. CHIN: Object to the form of the  
8 question.

9 THE WITNESS: If, as you say, the  
10 embodiment offered for this patent is one in which  
11 the disengagement of the lower surface of the probe  
12 from the portion of the upper surface of the probe  
13 dispense station does not, in fact, involve moving  
14 both the probe and the probe dispense station, then  
15 yes, in answer to your question.

16 MR. ZELIGER: Q. Does that change your  
17 view about how one of ordinary skill in the art  
18 might understand this, the claim language in claim  
19 30?

20 MR. CHIN: Object to the form.

21 THE WITNESS: No.

22 MR. ZELIGER: Q. So you just think that  
23 it's wrong?

24 MR. CHIN: Object to the form. Assumes  
25 facts.

1 THE WITNESS: Again, I don't -- I haven't  
2 looked at this patent and have, certainly have no  
3 knowledge of the embodiment, short of what you  
4 represented it as being, but if it is as you say,  
5 and as I suggested in my answer to the previous  
6 question, then it is misdescribed by claim 30.

7 MR. ZELIGER: Please hand Professor  
8 Nunberg Exhibit 3, with a copy to Mr. Chin.

9 Q. Would you please identify for the record  
10 what Exhibit 3 is.

11 A. Exhibit 3 is a patent application,  
12 publication, the number US 2003/0203493 A1, the pub  
13 date October 30th, 2003, and the assignee Ventana  
14 Medical Systems.

15 Q. What is the title of this patent  
16 application that's shown next to the number 54?

17 A. "Automatic" -- sorry. "Automated  
18 Molecular Pathology Apparatus Having Fixed Slide  
19 Platforms."

20 Q. Please turn to draft claim 45, which  
21 appears on the last page of the exhibit. And in  
22 particular -- you're welcome to read the entire  
23 claim or anything else that you deem necessary, but  
24 I would like to draw your attention to subpart (c)  
25 in claim 45 and ask you to read that aloud for the



1 record, please.

2 A. "A nozzle support having nozzles for  
3 applying liquids, said nozzle support and said slide  
4 support moving relative to one another such that the  
5 nozzles may apply liquids to the slides."

6 Q. Now, do you recall the title of this  
7 patent application is "Automated Molecular Pathology  
8 Apparatus Having Fixed Slide Platforms"?

9 A. Yes.

10 Q. I will represent to you, and there should  
11 be little doubt, based on the title, that the  
12 embodiments disclosed in this patent application  
13 only disclose a slide support mechanism that is  
14 stationary.

15 MR. CHIN: Object to form.

16 THE WITNESS: The question is?

17 MR. ZELIGER: Q. The question is, does  
18 the claim, according to your interpretation, cover  
19 that embodiment?

20 MR. CHIN: Object to form.

21 THE WITNESS: I'm not in a position to say  
22 what the relation in this invention is of the fixed  
23 slide platforms and the nozzle supports and slide  
24 supports mentioned in claim (c). So I can't really  
25 speak to the relationship of this to the embodiment.

1                   No sound.

2                   MR. ZELIGER: Sorry about that. I hit the  
3 wrong button.

4           Q. I'm not asking you to do that. I'm asking  
5 you to accept my representation that in this, in the  
6 embodiments disclosed in this patent application,  
7 the slide supports are stationary. And based on  
8 that representation, I'm asking you whether the  
9 claims, as you understand them, would cover such an  
10 embodiment.

11           MR. CHIN: Object to form.

12           THE WITNESS: Claim (c) applies to a  
13 nozzle support and said slide support, which is a  
14 slide support mentioned in (a) of claim 45. And on  
15 the assumption that what you've represented about  
16 the embodiment is that those two things, the nozzle  
17 support and the slide support, are both stationary,  
18 did you say, or . . .

19           MR. ZELIGER: Q. No, the slide support is  
20 stationary. The slide support alone is stationary.

21           A. Then if that's the case, that embodiment  
22 would be misdescribed by 44, 45(c).

23           Q. Are you aware, sir, that this patent  
24 application covers, intended to cover the device  
25 that's been accused of infringement in this case?

1 MR. CHIN: Object to the form.

2 THE WITNESS: No.

3 MR. ZELIGER: Q. Does the fact that  
4 Ventana's own patent application describing a  
5 stationary thing as being moving relative to  
6 something else that is moving change your opinion in  
7 any way?

8 A. No.

9 MR. CHIN: Object to form.

10 MR. ZELIGER: Q. So you think it's wrong?

11 MR. CHIN: Object to form.

12 THE WITNESS: I'll repeat what I said  
13 before. I think it misdescribes the embodiment that  
14 you've described, if the embodiment is as you  
15 described it.

16 MR. ZELIGER: Stephanie, would you please  
17 hand to Professor Nunberg Exhibit 10, with a copy to  
18 Mr. Chin.

19 Q. Professor Nunberg, what -- we've handed  
20 you a copy of Exhibit 10. And I'll represent to  
21 you, but you may confirm, if you like, that this  
22 table shows the claim language of the three  
23 different phrases that we've been considering;  
24 namely, a portion of claim 1 of the '261 patent, a  
25 portion of claim 30 of the '818 patent, and a

1 portion of draft claim 45 of the '493 patent  
2 application. Do you see that?

3 A. Yes. Let me just add that, on this one as  
4 well, I'm going to strike the second "other" from  
5 the '493 claim.

6 Q. I appreciate that. I'm doing the same on  
7 my copy. Thank you.

8 We've been through this, but I just want  
9 to make sure I understand your testimony. It's your  
10 opinion that in each of these three boxes, the two  
11 structures that are described as being relative to  
12 each other must each move.

13 MR. CHIN: Could I have the question back?

14 MR. ZELIGER: Let me try a better one.

15 Q. In Exhibit 10, three, portions of three  
16 claims or three claimed, or three draft claims are  
17 included. My question to you, sir, is is it your  
18 opinion that in each of these, the two structures  
19 identified must move?

20 A. Yes.

21 Q. Does the fact that there are now three  
22 different claims, or patent claims, patents or  
23 patent applications suggest to you that according to  
24 one of ordinary skill in the art, this language  
25 could describe a situation where one of the two

1 objects is stationary?

2 A. No.

3 Q. If I showed you 10 more patents that had  
4 this same construct, would that change your view?

5 MR. CHIN: Object to form.

6 THE WITNESS: Probably not.

7 MR. ZELIGER: Q. If I showed you 100 more  
8 patents that were worded in this way and disclosed  
9 embodiments where only one of the two objects moves,  
10 would that change your view?

11 MR. CHIN: Object to form. Calls for  
12 speculation and assumes facts.

13 THE WITNESS: Probably not.

14 MR. ZELIGER: Q. Is there any number of  
15 patents that would disclose such a construct that  
16 would change your opinion?

17 MR. CHIN: Same objections.  
18 Argumentative.

19 THE WITNESS: Probably if it were  
20 uniformly or near uniformly the case that this  
21 construction was used in mechanical engineering  
22 patents only to denote cases of this type,  
23 embodiments of this type.

24 MR. ZELIGER: Q. Have you consulted any  
25 mechanical engineering patents to determine whether

1           A.    If one takes the axis of the earth as, as,  
2   as fixed, as a fixed point, yes.

3           Q.    Well, regardless of whether one takes that  
4   as a fixed point, it's true that the building is  
5   revolving around it; isn't that true?

6           A.    This is exceeding my high school physics,  
7   but if you plot, if you plot the point of the  
8   building, motion the plot of the point of the  
9   building in space as the axis is moving, I don't  
10   know what you get.  You'd probably get a -- I'm not  
11   sure what the name of that curve is, but I don't  
12   know if I'd describe it as rotation, since the  
13   building never returns to its original position.  
14   But this is speculative high school physics, a  
15   discipline which I hadn't mastered even a year, a  
16   month after dropping the course or whatever.

17          Q.    But you'll agree with me that the building  
18   is moving relative to the axis of the earth,  
19   correct?

20          A.    Yes.

21          Q.    And the building is moving relative to the  
22   sun.

23          A.    Yes.

24          Q.    But when we say, "The elevator is moving"  
25   and we don't provide any other language, our

1 it, it may not be relevant to talking about objects  
2 at a subatomic level or to the objects with which  
3 cosmologists concern themselves, but anything,  
4 pretty much anything between those two, two levels  
5 is going to be governed by, by the same principles.

6 Q. If we go back to the language that's at  
7 issue in the, claim 1 of the '261 patent. And you  
8 can look at the patent, or if you prefer, why don't  
9 you take a look at Exhibit 10, which is the chart  
10 that has the different terms. And claim 1 of  
11 the '261 is excerpted in the first box. Do you see  
12 that?

13 A. Yes.

14 Q. If we strike -- I'm not asking you to do  
15 this, I don't want you to mark on the exhibit, but  
16 assume for a moment that we strike the last line of  
17 text in that box relative to each other.

18 A. Yes.

19 Q. How does that change your view of what  
20 this claim means?

21 MR. CHIN: Object to form.

22 THE WITNESS: It would continue to entail  
23 that the method was one that involved moving the  
24 platform and one that involved moving the liquid  
25 dispenser, but would no longer entail that either at

1 some point during the motion or at the end point of  
2 the motion those two were in different relative  
3 positions from one another.

4 MR. ZELIGER: Q. It would not require  
5 that they be in different positions at some point;  
6 is that correct?

7 A. Right. So if they were moved -- I'm  
8 doing -- if they were moved together, such that  
9 their relative positions did not change at any point  
10 during the motion or at the end point of the motion,  
11 then it would be true that one had moved the  
12 platform and the liquid dispenser but presumably  
13 false that one had moved the platform and the liquid  
14 dispenser relative to each other.

15 Q. But it would not preclude a situation  
16 where each is moving and they wind up in different  
17 positions.

18 A. No. It, it, it would leave it neutral as  
19 to whether their ultimate relative positions changed  
20 either at some point during the motion or at the  
21 end, at the end of the motion.

22 Q. As part of your analysis in this case, did  
23 you consult a physics book for examples of how  
24 relative motion is described?

25 A. No.



1 MR. ZELIGER: Q. So the precedent is "a  
2 platform," not "a moving platform," correct?

3 A. The antecedent, you mean.

4 Q. Antecedent, excuse me.

5 A. The original antecedent, yes, is "a  
6 platform," which is -- occurs again as the object of  
7 the verb "move" in the inserted part of claim 6, and  
8 then is further referred to as "the platform" in the  
9 last clause of claim 6, and then as specified in  
10 claim 8 as "a moving platform capable of indexing  
11 slides," et cetera.

12 Q. If the -- why add "platform is a" --

13 (Reporter interruption)

14 MR. ZELIGER: Q. Why add the language  
15 "platform is a" to claim 8? What does that add?

16 MR. CHIN: Object to the form of the  
17 question.

18 THE WITNESS: As I say, all it does is  
19 change what was a presupposition -- that the  
20 platform is capable of moving -- to an assertion  
21 that the platform is, among other things, a platform  
22 capable of moving. There's a difference of focus or  
23 emphasis, as linguists might describe it.

24 MR. ZELIGER: Q. Is it superfluous, in  
25 your view?

1 MR. CHIN: Object to form.

2 THE WITNESS: It does not alter the truth  
3 conditions of the claim, in linguistic terms. That  
4 is to say, it's not conceivable that there should be  
5 a state of affairs in which claim A is true under  
6 one wording and false under the other.

7 MR. ZELIGER: Q. So it has no impact on  
8 the claim scope?

9 A. That's right.

10 Q. Is it a more plausible explanation that  
11 the applicant struck the word "moving" from claim 6  
12 to indicate that the platform need not move in  
13 claim 6, and then in claim 8 explained under certain  
14 circumstances the platform is a moving platform?

15 MR. CHIN: Can I have that question back,  
16 please.

17 (Record read by the reporter)

18 MR. CHIN: Object to the form of the  
19 question. It's vague, compound, and confusing.

20 THE WITNESS: Yeah, I simply can't speak  
21 to what the applicant's intentions might have been  
22 or what the applicant's apprehensions as to the  
23 meaning of these various phrases may have been. I  
24 can only speak to the way the phrases would be  
25 interpreted by a linguistically competent neutral

1           A.    Let me just stipulate -- I don't recall  
2   how I used it, but let me just say that we may speak  
3   of relative motion as motion of at least two objects  
4   such that at some point during the course of the  
5   motion or at the termination of the motion, the  
6   relative position of the two objects is different  
7   from what it was at the beginning of the motion.  Is  
8   that fair?

9           Q.    Is it your opinion that for there to be  
10  relative motion between two objects, both objects  
11  must move?

12           MR. CHIN:  Object to form.

13           THE WITNESS:  I don't know.  Let me think.

14           MR. ZELIGER:  Q.  Well, let me give you an  
15  example.  I'm sorry.  Did you have additional, an  
16  additional answer?

17           A.    No.  Go ahead with the example you have in  
18  mind.

19           Q.    I gather you lecture from time to time  
20  from a lectern?

21           A.    Yes.

22           Q.    I want you to envision that you're  
23  standing in front of a classroom at a lectern.

24           A.    Yes?

25           Q.    And behind you, the wall moves from left

1 to right while your lectern removes bolted to the  
2 floor.

3 A. A more reasonable assumption in this part  
4 of the world than yours, yes.

5 Q. So while the wall is moving, is the wall  
6 moving relative to you?

7 A. So there's an earthquake, the wall moves,  
8 the lectern is bolted to the floor and for some  
9 reason isn't moving. I'm standing at the lectern.  
10 Yes, the wall is moving relative to me.

11 Q. I'm going to take the earthquake, the  
12 complexity of the earthquake out of it. I want you  
13 to assume that the wall is like a retractable wall.

14 A. Okay.

15 Q. So imagine now that the wall is moving;  
16 the lectern remains bolted to the floor. Is the  
17 wall moving relative to you?

18 A. So it's -- the wall is moving to the side  
19 or . . .

20 Q. Yes, from left to right.

21 A. I guess I would say it was, yes.

22 Q. Are you moving relative to the wall at  
23 that point?

24 A. No.

25 Q. Now I'm going to change the hypothetical a

1 little bit and say that the wall remains stationary  
2 but now your lectern is mounted on wheels. And  
3 during your lecture, the lectern moves from left to  
4 right. During that motion, are you moving relative  
5 to the wall?

6 A. And I'm tracking the lectern and the  
7 lectern is dragging me along with it or something?

8 Q. You're standing on a platform in front of  
9 the lectern. The platform and lectern are moving  
10 together from left to right.

11 A. Yes, then I'm moving relative to the wall.

12 Q. Is the wall moving relative to you?

13 A. No.

14 Q. Isn't it true that all motion is relative?

15 MR. CHIN: Object to form. Vague.

16 THE WITNESS: I simply don't know what you  
17 mean by that. I can imagine 18 things you might  
18 mean, so you'll have to be more specific.

19 MR. ZELIGER: Q. Isn't it true that in  
20 both cases that I've described to you -- namely,  
21 where in one instance the lectern moves, in the  
22 other instance the wall moves -- in both cases, you  
23 are moving relative to the wall and the wall is  
24 moving relative to you?

25 MR. CHIN: Could I have that question

1 back, please.

2 MR. ZELIGER: Q. I'll repeat it. Isn't  
3 it true in both cases you are moving relative to the  
4 wall and the wall is moving relative to you?

5 MR. CHIN: Object. That's been asked and  
6 answered, and that's also compound.

7 THE WITNESS: No.

8 MR. ZELIGER: Q. If standard lectures on  
9 basic physics said the opposite, would that change  
10 your view or your opinions in this case?

11 A. Not with regard to the ordinary English  
12 meaning of those sentences that we've been  
13 discussing, no.

14 Q. How about with regard to how relative  
15 motion would be understood by a mechanical engineer?

16 A. Again, no. It would have no effect.

17 Q. And you say that without knowing how a  
18 mechanical engineer understands those terms; isn't  
19 that correct?

20 MR. CHIN: Object to form.

21 THE WITNESS: I assume that when a  
22 mechanical engineer writes a patent, some of the  
23 language that he or she uses involves terms of art  
24 that are specific to mechanical engineering, but  
25 that when the mechanical engineer uses an "S" to

1 form the third person present form of a verb or uses  
2 the word "the" to denote something to which earlier  
3 reference is being made, or uses the pronoun,  
4 pronominal "each other" to indicate a reciprocal  
5 relation, that he or she is speaking or writing not  
6 in his or her capacity as a mechanical engineer but  
7 in his or her capacity as a graduate of kindergarten  
8 in the English-speaking world.

9 MR. ZELIGER: Q. And in your view,  
10 anybody who's graduated from kindergarten would  
11 understand that in the phrase "moving the platform  
12 in a liquid dispenser relative to each other"  
13 requires both the platform and the liquid dispenser  
14 to move?

15 A. Inasmuch as "relative to," unlike "and"  
16 and "each other" is not something most people have  
17 mastered by the time they're out of kindergarten,  
18 let me take it up to seventh or eighth grade and  
19 then say yes.

20 Q. Professor Nunberg, did you discuss your  
21 testimony today with Mr. Chin during the previous  
22 break?

23 A. Yes.

24 Q. What did you discuss?

25 A. I asked him if he was aware of the Ventana

1 you again, Professor Nunberg. We appreciate your  
2 patience.

3 THE WITNESS: Thank you very much.

4 THE VIDEOGRAPHER: Okay. Here marks the  
5 end of videotape number three in the deposition of  
6 Professor Geoffrey Nunberg. The original videotapes  
7 will be retained by LegaLink Boston, 210 South  
8 Street, 11th floor, Boston, Massachusetts. Going  
9 off the record, the time is 2:42.

10 (Whereupon, the deposition was  
11 adjourned at 2:42 p.m.)

12 --oOo--

13 I declare under penalty of perjury that  
14 the foregoing is true and correct. Subscribed at  
15 \_\_\_\_\_, California, this \_\_\_\_\_ day of  
16 \_\_\_\_\_, 2006.

17

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19

\_\_\_\_\_  
GEOFFREY D. NUNBERG

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1 CERTIFICATE OF REPORTER

2 I, CAROLYN M. MANN, a Certified Shorthand  
3 Reporter, hereby certify that the witness in the  
4 foregoing deposition was by me duly sworn to tell  
5 the truth, the whole truth, and nothing but the  
6 truth in the within-entitled cause;

7 That said deposition was taken down in  
8 shorthand by me, a disinterested person, at the time  
9 and place herein stated, and that the testimony of  
10 the said witness was thereafter reduced to  
11 typewriting, by computer, under my direction and  
12 supervision;

13 That before completion of the deposition,  
14 review of the transcript [X ]was [ ]was not  
15 requested. If requested, any changes made by the  
16 deponent (and provided to the reporter) during the  
17 period allowed are appended hereto.

18 I further certify that I am not of counsel  
19 or attorney for either or any of the parties to the  
20 said deposition, nor in any way interested in the  
21 event of this cause, and that I am not related to  
22 any of the parties thereto.

23 DATED: \_\_\_\_\_, 2006

24 \_\_\_\_\_

25 CAROLYN M. MANN, CSR 10066

1 April 25, 2006

2 Geoffrey D. Nunberg, Ph.D.  
3 370 Fair Oaks St.  
4 San Francisco, CA 94110

5 Re: CytoLogix vs. Ventana Medical Systems

6 Dear Dr. Nunberg:

7 Please be advised that the original  
8 transcript of your deposition taken April 20, 2006,  
9 in the above-entitled matter is available for  
10 reading and signing. The original transcript will  
11 be held at the offices of:

12 LegaLink San Francisco  
13 575 Market Street, 11th Floor  
14 San Francisco, California 94105  
15 (415) 357-4300

16 for thirty (30) days, in accordance with Federal  
17 Rules of Civil Procedure Section 30(e). If you do  
18 not sign your deposition within 30 days, it may be  
19 used as fully as though signed.

20 If you are represented by counsel in this  
21 matter, you may wish to ask your attorney how to  
22 proceed. If you are not represented by counsel and  
23 wish to review your transcript, please contact our  
24 office for a mutually convenient appointment to  
25 review your deposition.

Thank you for your cooperation.

Sincerely,

Carolyn M. Mann, CSR 10066

cc: Original transcript  
Michael E. Zeliger, Attorney at Law  
Roger J. Chin, M.D., Attorney at Law

LegaLink San Francisco (415) 357-4300